

genex

POWER TO RESTORE WITHOUT LEAVING A TRACE



The only remaining
evidence of the trauma



Perfect partner for your trauma and non-unions

Your choice of synthetic bone graft not only influences the efficiency of each surgical procedure, it has considerable impact on the long-term outcome.

genex is a catalyst for bone healing. It complements the body's natural healing processes and encourages normal bone structure to be restored at a steady rate. Over 12 months, the graft matrix is completely absorbed and replaced by bone.^{1,2} No foreign artifacts are left behind to impair structural integrity.

- ✓ Cleared for bony voids and defects that are not intrinsic to the stability of the bony structure



An innovative, versatile choice that supports natural healing, then vanishes without a trace

geneX offers successful long-term outcomes across a range of surgical applications, including tibial plateau fractures and long-bone non-unions



TIBIAL PLATEAU FRACTURE^{3*}

Patient presented with: Comminuted Schatzker type II fracture of right leg. X-ray examination revealed 2 large fragments and several small fragments.

Outcome: At 15 months' follow-up the fracture had healed and knee was stable, with a range of motion of 0-130°. geneX had completely absorbed.



PROXIMAL FEMUR FRACTURE^{2*}

Patient presented with: Failed intramedullary nailing of an extracapsular neck of femur fracture. Patient complained of prominent metalwork and pain.

Outcome: At 12 months' follow-up the fracture had healed with complete absorption of geneX. Patient had a good range of hip motion and was able to walk and manage stairs.



DISTAL TIBIA NON-UNION^{4*}

Patient presented with: Healed fibula with a non-union of the distal tibia and a fracture through the nail, 19 months after the initial operation.

Outcome: At 10 months' follow-up the non-union had healed completely, patient had fully recovered and was scheduled to have the intramedullary nail removed.



Designed to be completely absorbed and leave no trace

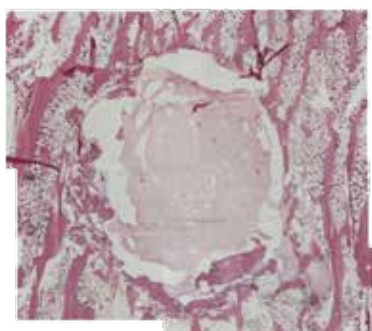
genex is a precisely balanced β -tricalcium phosphate/calcium sulfate hemihydrate compound with distinct design properties:

- ✓ Contains no hydroxyapatite (HA)
- ✓ Negatively charged surface chemistry

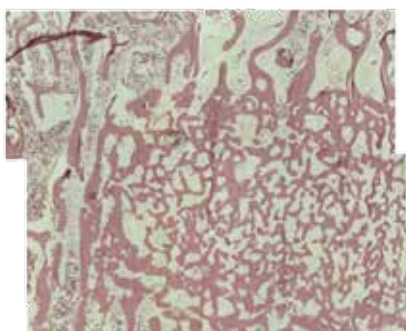
genex provides a powerful scaffold for accelerated bone restoration and helps to hinder soft tissue ingrowth:

- ✓ Fully absorbed within 12 months
- ✓ Enhances osteogenic response
- ✓ Restores strong healthy bone

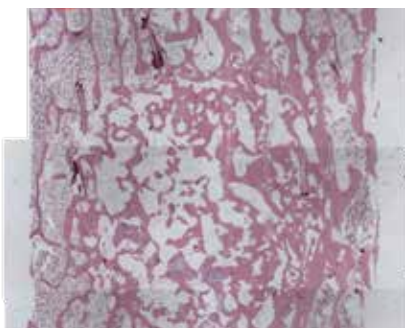
Completely absorbed within 12 months^{1,2}



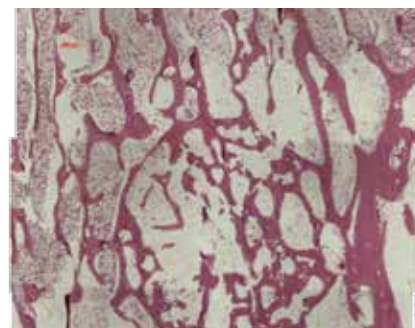
genex implantation¹



8 weeks



16 weeks

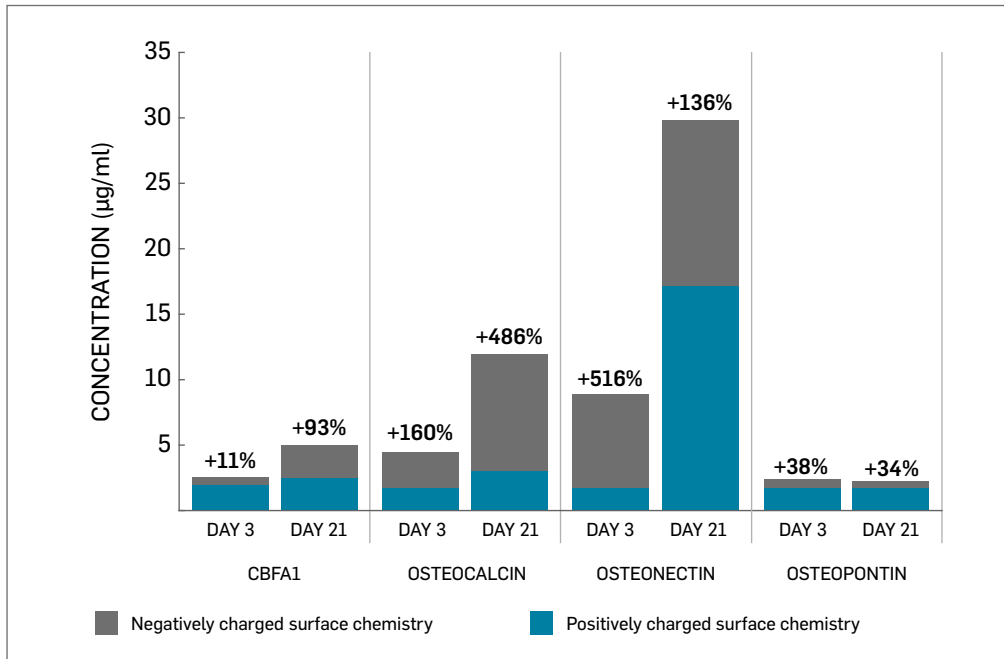


36 weeks

genex contains no hydroxyapatite. HA can only be absorbed at 1-2% per year⁵

Large animal model. Decalcified histology H & E stain.

Enhances the osteogenic response to accelerate bone growth – 5x normal levels⁶



Restores strong healthy bone within a clinically relevant timeframe^{2,3}



Tibial plateau fracture



Post-operative



15 months

genex restores bone to normal trabecular structure in 36 weeks¹



Versatility at your fingertips

genex is versatile and easy to prepare. It comes as a paste or putty in a range of volumes. The paste sets within 15 minutes at body temperature, and can be digitally implanted or injected in difficult-to-reach sites or minimally invasive procedures.



A range of surgical applications

PRODUCT	PASTE VOLUME	SETTING TIMES	ORDER CODES
genex Setting paste for molding, injecting and packing	5cc	15 minutes approx.	900-005
	10cc		900-010
genex ds Setting paste for difficult-to-reach surgical sites	2.5cc	15 minutes approx.	980-002
	5cc		980-005
genex putty Non-setting putty that requires no mixing	2.5cc	Non-setting	920-002
	5cc		920-005
	10cc		920-010

POWER TO RESTORE WITHOUT LEAVING A TRACE

✓ Perfect partner for your trauma and non-unions

✓ Designed to be completely absorbed and leave no trace^{1,2}

✓ Versatility at your fingertips

At Biocomposites, we are proud to be driving improved outcomes across a wide range of clinical applications for patients and surgeons. Our team of specialists is singularly focused on the development of innovative calcium compounds for surgical use. With over 25 years' experience and an unrivaled dedication to quality, the products we research, engineer and manufacture are at the forefront of calcium technology.



All Biocomposites' products are engineered, manufactured and shipped from our facilities in Keele, UK.

References: 1. Yang HL *et al.* Bone healing response to a synthetic calcium sulfate/beta-tricalcium phosphate graft material in a sheep vertebral body defect model. *J Biomed Mater Res B Appl Biomater* 2012;100B(7):1911-21. 2. Data on file, Mr A Nissar and Mr S Gopal. 3. Data on file, Mr HK Sharma. 4. Data on file, Prof JB Richardson. 5. Pina S, Ferreira JMF. Bioresorbable plates and screws for clinical applications: A review. *J Healthcare Engineering* 2012;3(2):243-60. 6. Cooper JJ *et al.* Enhancing the osteogenic potential of bioabsorbable implants through control of surface charge. Presented at the Society for Biomaterials 2007 Annual Meeting, April, 2007: Chicago, Illinois, USA.

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